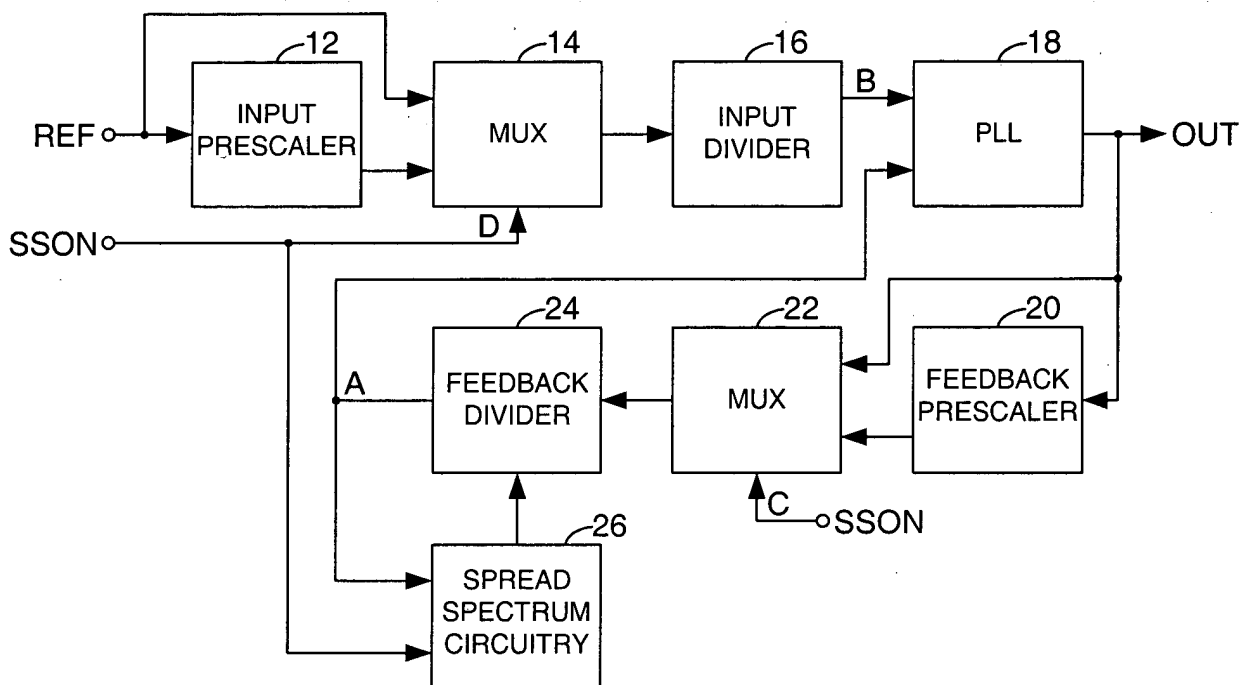
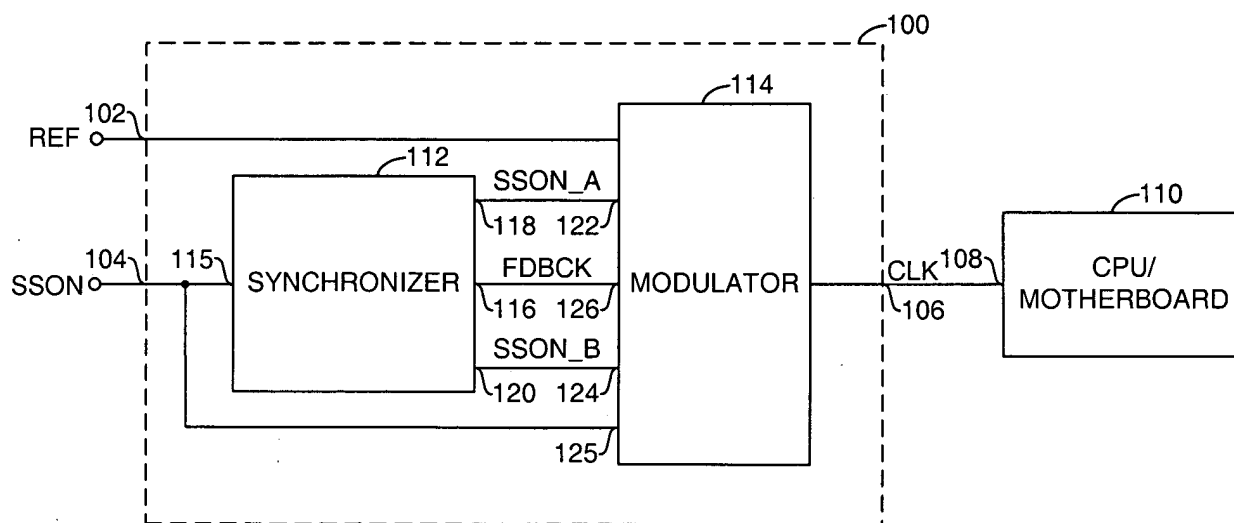




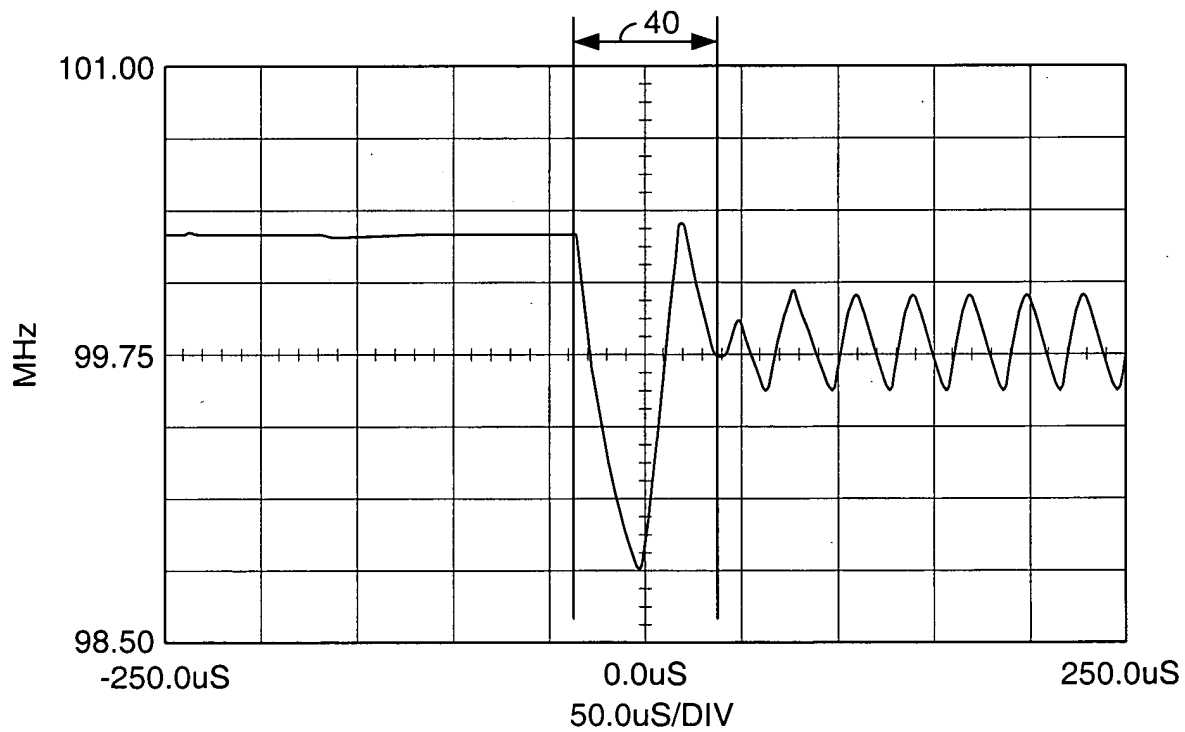
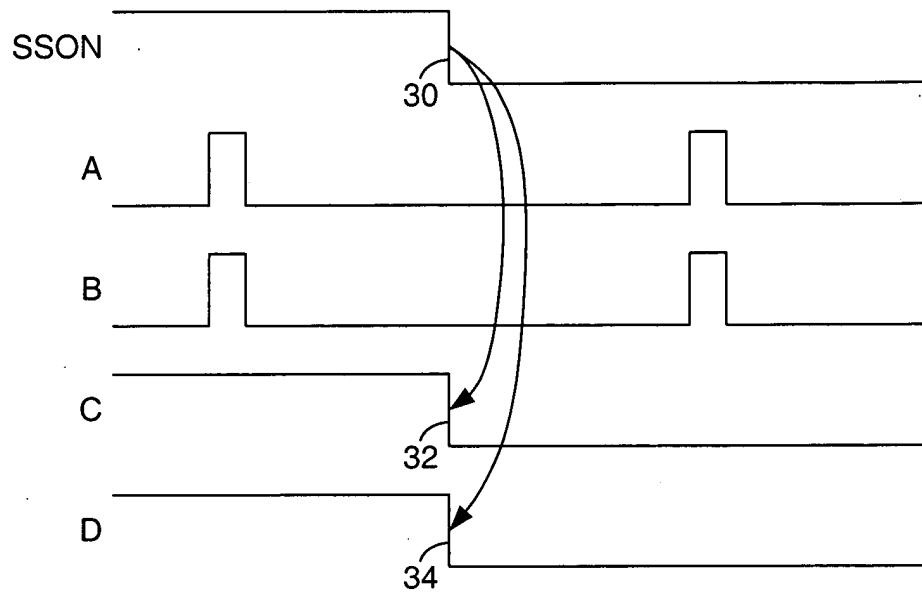
10



(CONVENTIONAL)

**FIG. 1****FIG. 3**

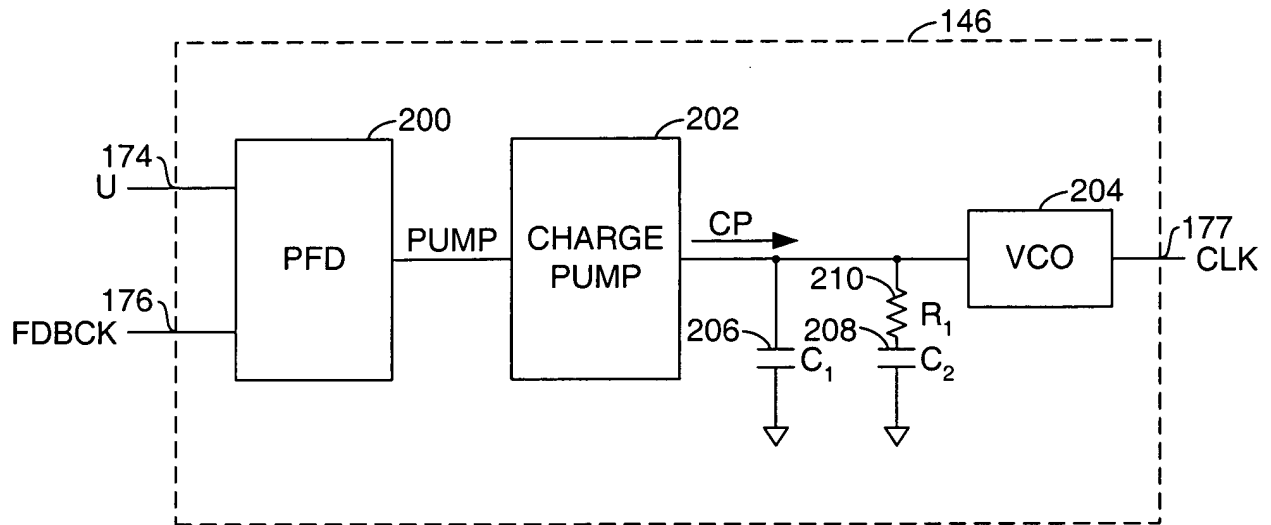
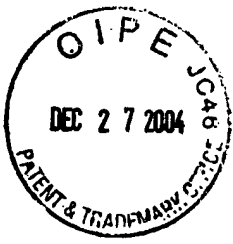
BEST AVAILABLE COPY

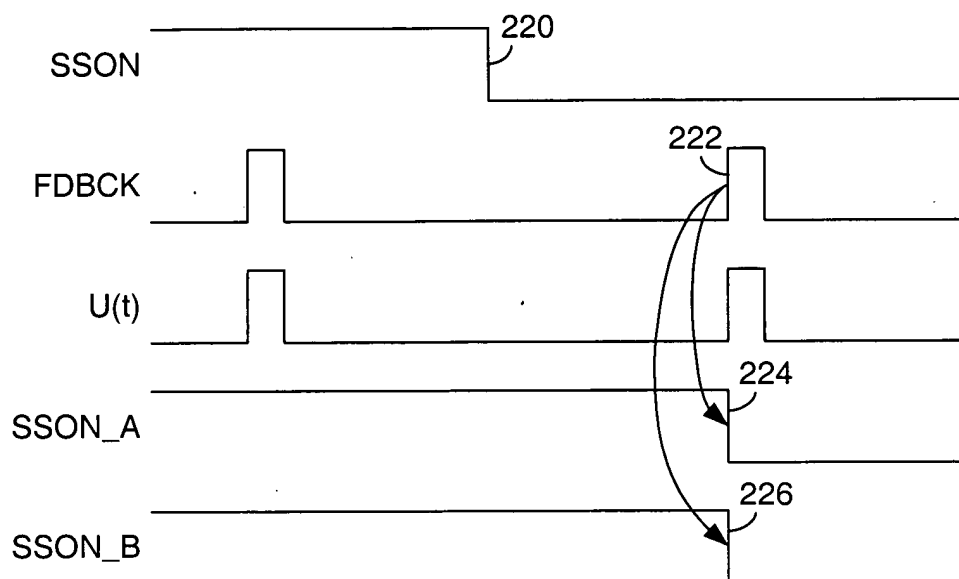


(CONVENTIONAL)

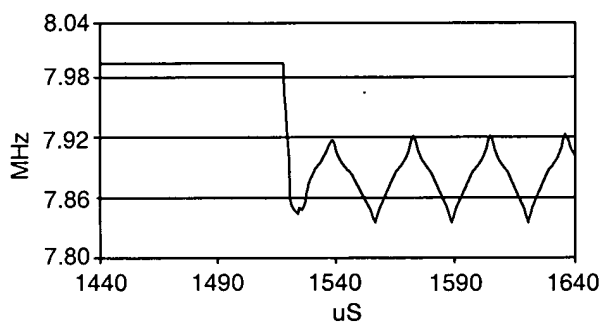
**FIG. 2**



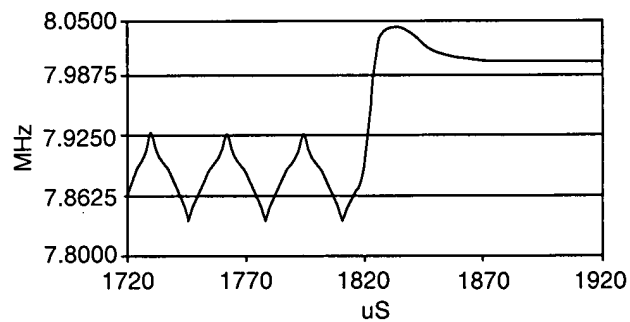
**FIG. 5**



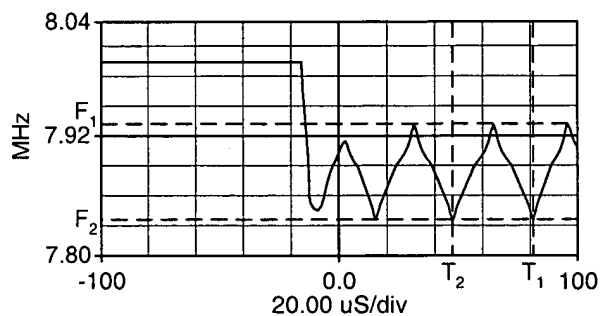
## SPREAD SPECTRUM TRANSITION BEHAVIORS ARE CONTROLLED BY THE PROGRAM



(a)

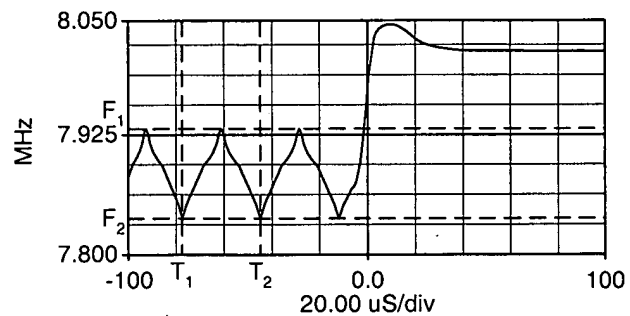


(b)


$$\begin{array}{lll} T_1 = 49.33\mu\text{S} & T_2 = 01.33\mu\text{S} & \Delta = 32.00\mu\text{S} \\ F_1 = 7.93125\text{MHz} & F_2 = 7.83750\text{MHz} & \Delta = -93.75\text{KHz} \end{array}$$

MEAN = 7.9401907MHz      PK - PK = 173.44KHz

(a)


$$\begin{array}{lll} T_1 = -76.89\mu\text{S} & T_2 = -44.89\mu\text{S} & \Delta = 32.00\mu\text{S} \\ F_1 = 7.93125\text{MHz} & F_2 = 7.83750\text{MHz} & \Delta = -93.75\text{KHz} \end{array}$$

MEAN = 7.9530444MHz      PK - PK = 206.85KHz

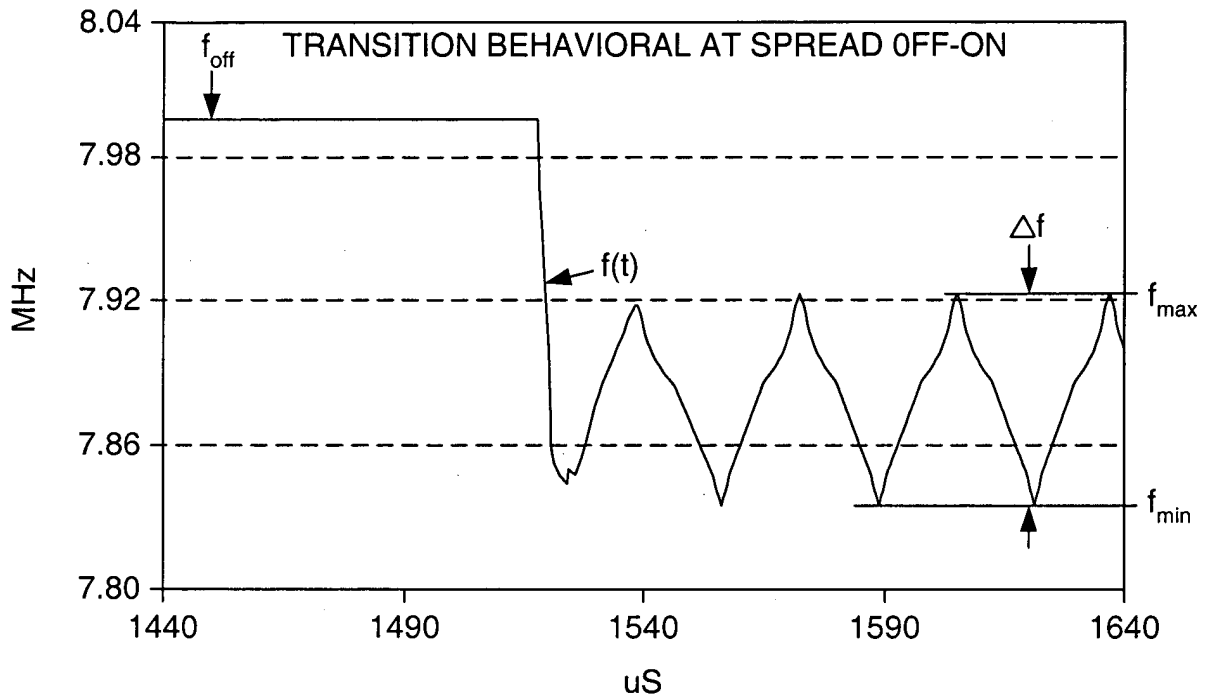
(b)

**FIG. 6**

**BEST AVAILABLE COPY**



## CRITERIA FOR DETERMINING "GOOD AND BAD" SS TRANSIENT BEHAVIOR



$f(t)$  : PLL's RUNNING FREQUENCY IN TRANSIENT PERIOD

$f_{off}$  : PLL's SSCG OFF FREQUENCY

$f_{max}$  : MAXIMUM FREQUENCY IN SSCG ON

$f_{min}$  : MINIMUM FREQUENCY IN SSCG ON

$\Delta f$  : PEAK TO PEAK FREQUENCY IN SSCG

CRITERIA NEED TO BE SATISFIED:

FREQUENCY RUNNING RANGE DURING TRANSIENT  $f_{min} \leq f(t) \leq f_{off}$

**FIG. 7**

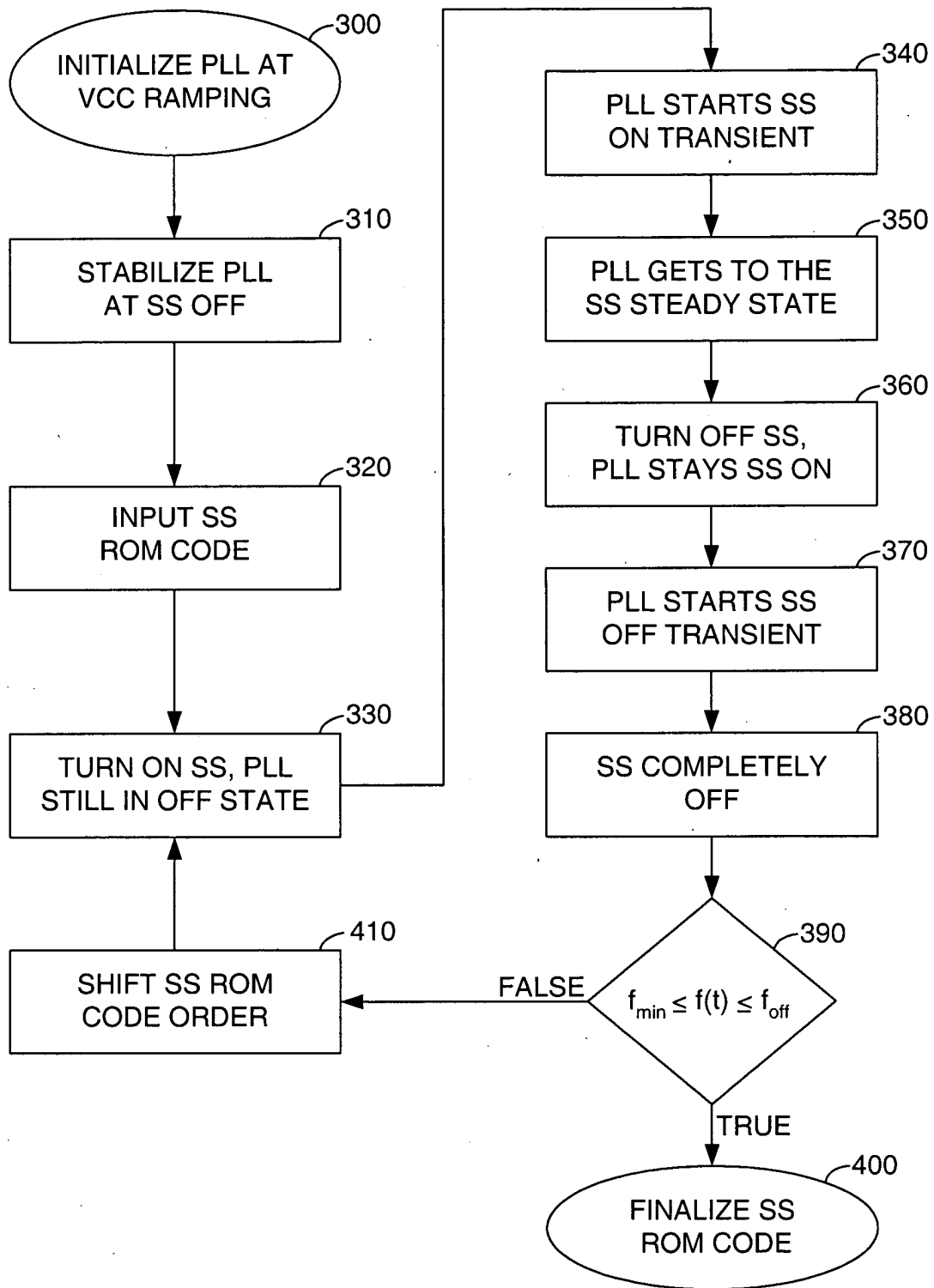
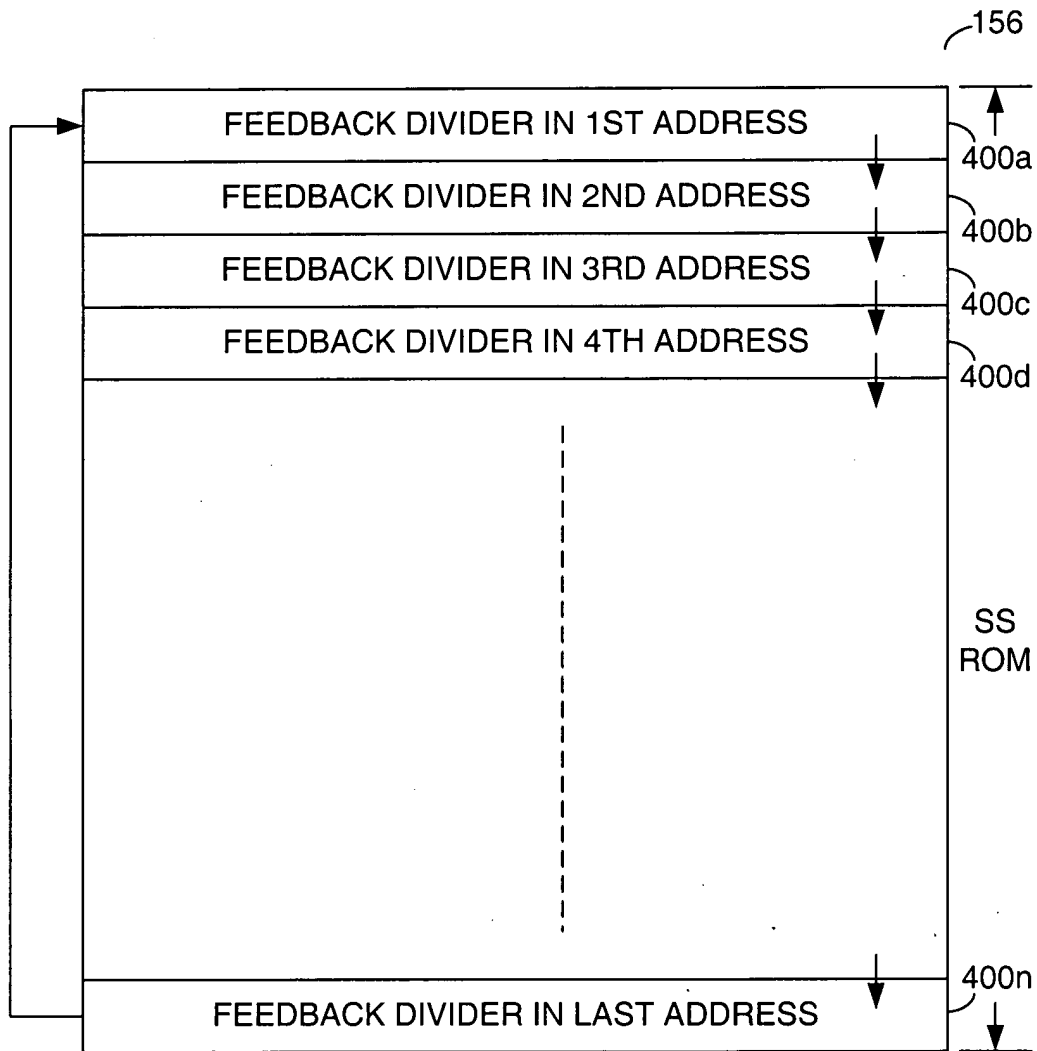


FIG. 8



## ORDER SHIFTING STEP IN RESPONSE TO BAD BEHAVIOR



MOVE FEEDBACK DIVIDER IN LAST ADDRESS TO 1ST ADDRESS AND SHIFT DOWN SS ROM CODE.

**FIG. 9**